

Commonwealth of Massachusetts Division of Fisheries & Wildlife Route 135 Westborough, MA 01581 (508) 792-7270 ext. 200

MASSACHUSETTS RARE AND ENDANGERED PLANTS

Michaux's Sedge (Carex michauxiana Boeckl.)

Description

Michaux's Sedge is cespitose (several stems grow from one leafy base) with slender, erect, yellowish green stems (culms) reaching 20-60 cm (8-24 in.) in height. The basal leaves are flat, crowded and shorter than the culms. Several slender leaves 2-5 mm wide ascend the culms and the upper leaf bracts are distinctly longer than the flower spikes. There are 2-4 female spikes per culm, arranged in small clusters of slender, pointed fruits (perigynia). Each greenish to straw-colored fruit has at its base a small scale which is characteristically less than 1/2 of the length of the perigynium. The single male flower spike is virtually stalkless and usually hidden by the uppermost female spike.

Similar Species

Long's Sedge (Carex folliculata) looks much like Michaux's Sedge, only larger overall and lacking the yellow tinge to its stems and leaves. Its leaf blades are usually wider, 5-15 mm versus 2-5 mm for Michaux's Sedge, and its perigynia are longer and much thicker. The scales of Long Sedge are also pointed and at least 3/4 the length of the perigynia. Long

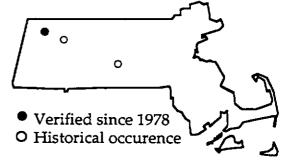


1988. Minnesota's Endangered Flora & Fauna. Dept. of Natural Resources. State of Minnesota

Sedge is also more common in damp to wet soils nearly throughout the state.



Range of Michaux's Sedge



Massachusetts Distribution by Town

Range

Michaux's Sedge is a subarctic and boreal species of n. e. North America and e. Asia that prefers bogs, wet meadows, pond shores and abandoned beaver ponds. It is chiefly distributed from Newfoundland to Ontario south throughout n. New England, w. Massachusetts, to n. New York and Michigan. Two populations disjunct from its principle range were recently discovered in n.Saskatchewan, extending the western distribution of this species. The reason for its rarity in this state is partially due to Massachusetts' position at the extreme southern edge of this species range.

Habitat

Michaux's Sedge is a cold-adapted, high elevation/high latitude species that descends into Massachusetts on the Berkshire Plateau, a region with a cool, moist (highest precipitation in the state) and persistent snow cover. The generally acidic bedrock, covered by glacial till and a thick accumulation of humus favors northern plant communities. Michaux's Sedge is found in the transition zone where northern hardwoods- Beech, Sugar Maple and Yellow Birch mix with northern conifers- Red Spruce and Balsam Fir. The current population of Michaux's Sedge inhabits a very shallow, marsh-like, former beaver pond and is confined to the peaty shelves along the small, seepy creeks that dissect the sphagnum mats and drain into the pond. This is an open, sunny, potentially seasonally inundated habitat preferred by the mixed herb-sedge-grass marsh community. Several species of northern affinities are present, including: Rattlesnake Grass (Glyceria canadensis), One-flowered Muhly (Muhlenbergia uniflora), Tawny Cottongrass (Eriophorum virginianum), Small Green Orchis (Platanthera clavellata), and Round-leaved Sundew (Drosera rotundifolia). Dangers to this community are pond drainage and plant succession.

Population Status

This species is assigned to the Endangered category of the Massachusetts rare native plant list because only one population has been found since 1978. Prior to that time only two stations were reported. Populations of Michaux's Sedge may be few due to both climatic and very specific habitat requirements. Apparently suitable habitat still exists within the species range and further inventory may reveal more populations. Presently the Berkshire population of Michaux's Sedge is relatively secure in a State Forest, but its proximity to an historical tannery site could threaten it if the pond's water level was raised in conjunction with restoring the tannery.